



Evaluation of Telemedicine Services in the Texas Workers' Compensation System 2018-2021



Workers' Compensation
**Research &
Evaluation Group**

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**Division of Workers'
Compensation**

Per Chapter 405 of the Texas Labor Code, the Workers' Compensation Research and Evaluation Group (REG) at the Texas Department of Insurance is responsible for conducting professional studies and research on various system issues, including:

- the delivery of benefits;
- litigation and controversy related to workers' compensation;
- insurance rates and rate-making procedures;
- rehabilitation and reemployment of injured employees;
- the quality and cost of medical benefits;
- employer participation in the workers' compensation system;
- employment health and safety issues; and
- other matters relevant to the cost, quality, and operational effectiveness of the workers' compensation system.

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Executive Summary

Telemedicine services have been available in the Texas workers' compensation system since 2003. In 2005, Texas Labor Code §413.011 required the Texas Department of Insurance, Division of Workers' Compensation (DWC) to follow medical billing, coding, documentation, and reimbursement methodologies used by the federal Centers for Medicare and Medicaid Services (CMS) for treating injured employees. Under Medicare, availability and access to telemedicine services are restricted because Medicare requirements limit the physical and geographic locations where telemedicine can be done, and the kinds of services that can be reimbursed.

To expand access to telemedicine services, DWC adopted 28 Texas Administrative Code (TAC) §133.30 on September 1, 2018, which made certain exceptions to Medicare's telemedicine requirements.¹ The rule expanded access to medical care by allowing health care providers to bill and be reimbursed for telemedicine services in the workers' compensation system regardless of where an injured employee is located when they get the service. However, DWC's rule did not make any exception to Medicare's list of services that can be billed and reimbursed as telemedicine services.²

On March 13, 2020, Governor Greg Abbott declared a state of disaster in Texas because of the COVID-19 pandemic. Telemedicine was considered to be a valuable tool to mitigate and prevent the spread of COVID-19 because it allowed access to necessary medical care, while limiting physical contact between patients and health care providers. In response to a federal public health emergency, CMS temporarily expanded the list of services that could be conducted through telemedicine to include physical, occupational, and speech therapy. However, federal law still prohibited physical and occupational

Key Findings

Percentage of Claims: Less than 1 percent of claims receiving professional medical services received telemedicine pre-pandemic but increased to 7 percent of claims during the pandemic.

Utilization: Telemedicine utilization was low until March 2020 when the pandemic began. Utilization increased again as DWC's emergency rule 28 TAC §167.1 took effect in April 2020. This expanded access to telerehabilitation services, but when Texas began reopening, there was a rapid decline in the use of these services.

Demographics: During the pandemic, more men and older injured employees received telemedicine services.

Type of Service: Office visits were the most frequently used telemedicine service before and during the pandemic.

Cost: Total payments for telemedicine services increased during the COVID-19 pandemic. Insurance carriers paid about three-fourths of billed services.

Days from Injury: The average number of days from injury to initial telemedicine service was about six to seven weeks from April to September 2020, but decreased in 2021 to about three weeks.

¹ 28 TAC §133.30 made an exception to Medicare's payment policy restrictions requiring telemedicine services to be provided at an originating site and requiring that originating site be in a federal Healthcare Professional Shortage Area (HPSA) designated by the Bureau of Health Workforce.

² See www.cms.gov/Medicare/Medicare-General-Information/Telehealth/Telehealth-Codes for a list of telemedicine services that can be billed and reimbursed in the Texas workers' compensation system.

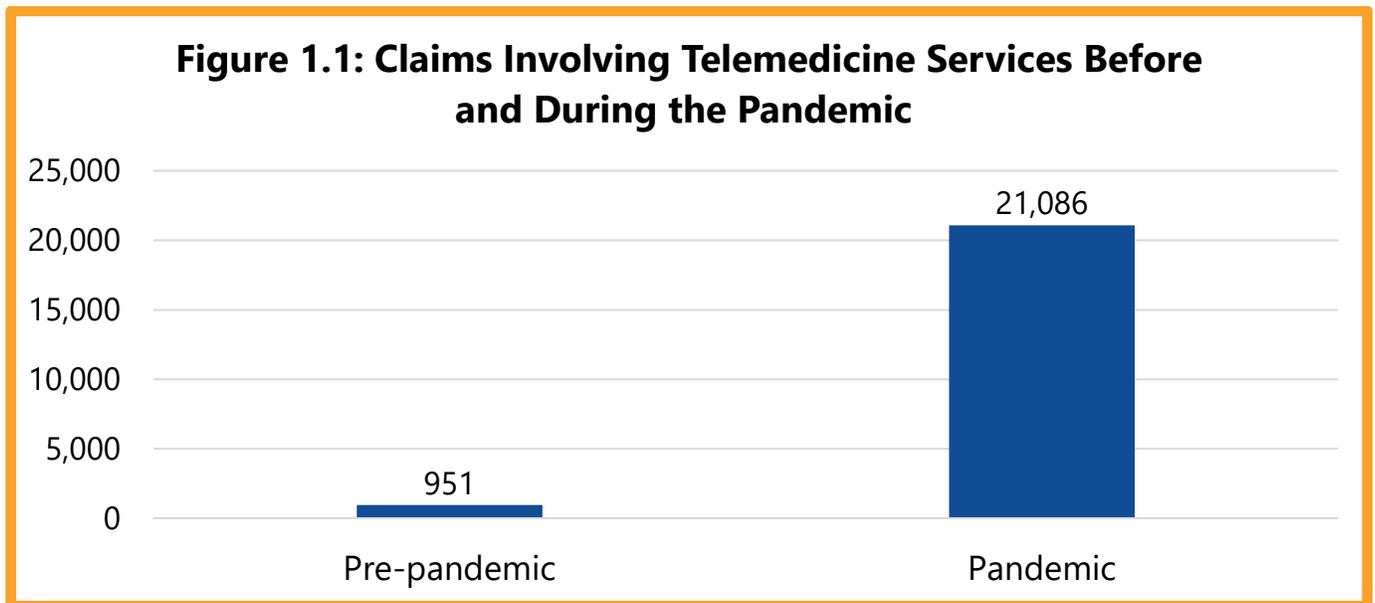
therapists and speech pathologists from billing and being reimbursed for telemedicine services.

On April 13, 2020, DWC adopted an emergency rule in 28 TAC §167.1 to allow physical and occupational therapists and speech pathologists to bill and be reimbursed for telemedicine services in the Texas workers' compensation system. CMS then expanded the ability of health care providers to bill and be reimbursed for telemedicine services for the duration of the federal public health emergency. DWC's emergency rule expired in October 2020, but physical and occupational therapists and speech pathologists can still bill and be reimbursed for telemedicine services until the federal public health emergency expires.

This report presents information on the use and cost of telemedicine services in the Texas workers' compensation system since DWC's adoption of §133.30. The analysis includes telemedicine services provided to injured employees from September 1, 2018, to July 31, 2021, unless otherwise noted. Specifically, this report compares the use and cost of telemedicine services during the pre-pandemic period (September 1, 2018, to March 12, 2020), with the initial COVID-19 pandemic period (March 13, 2020, to July 31, 2021). The report also compares telemedicine use for network and non-network claims. However, this portion of the analysis is limited to the data collected by DWC through its annual network data call (which includes claims with dates of injury before June 2020). Findings from this report provide a baseline to track future changes in the utilization and cost of telemedicine services for injured employees in Texas.

Utilization of Telemedicine Services

Overall, only 3 percent of claims that received professional medical services received at least one telemedicine service from September 1, 2018, through July 31, 2021. However, Figure 1.1 shows that the number of claims that received telemedicine services greatly increased during the pandemic. Less than 1 percent of claims that received professional medical services pre-pandemic (951 claims) had at least one telemedicine service, compared to about 7 percent of claims (21,086 claims) during the pandemic.

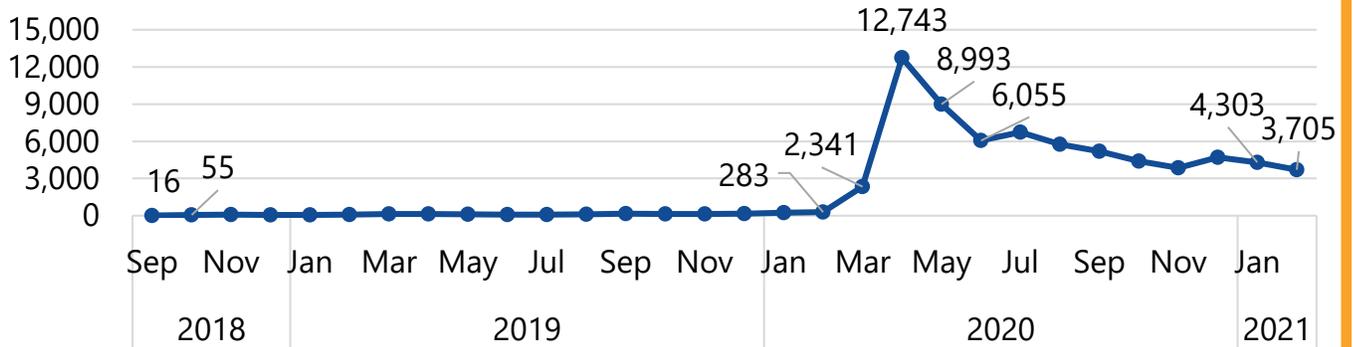


Source: Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2021.

Telemedicine Services Overview

Figure 1.2 shows that even after DWC adopted 28 TAC §133.30 on September 1, 2018, the use of telemedicine services remained low until March 2020 when Governor Abbott's COVID-19 disaster declaration took effect. Utilization increased when emergency rule 28 TAC §167.1 was adopted by DWC in April 2020 to expand access to telerehabilitation services, but then declined rapidly as Texas started to reopen. Overall, the utilization of telemedicine services was higher during the pandemic than before the pandemic.

Figure 1.2: Number of Telemedicine Services by Service Year and Month



Month	# of Services in 2018	# of Services in 2019	# of Services in 2020	# of Services in 2021
January	—	50	239	4,303
February	—	92	283	3,705
March	—	125	2,341	—
April	—	141	12,743	—
May	—	111	8,993	—
June	—	78	6,055	—
July	—	94	6,734	—
August	—	109	5,757	—
September	16	173	5,188	—
October	55	130	4,404	—
November	87	141	3,852	—
December	57	168	4,705	—

Source: Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2021. Note: This analysis uses service dates through February 2021 to allow enough time for medical services rendered after the injury date to be billed, processed, and reported to DWC.

Telemedicine Services by HCPCS Code

As shown in Table 1.1 and 1.2, the most frequently used telemedicine service before and during the pandemic was evaluation and management services (i.e., office visits).³ There were variations in the level of telemedicine evaluation and management services billed by health care providers before and during the pandemic. During the pandemic, health care providers billed for a higher percentage of shorter office visits than during the pre-pandemic period. Although the emergency rule adopted by DWC in April 2020

³ For the purposes of identifying the top 10 most frequently used telemedicine services, services associated with code 99080 (i.e., the completion of the DWC Form-073, *Work Status Report*) were excluded from this analysis since the completion of this form is considered an administrative function and not treatment.

expanded access to telerehabilitation services, these were just a small percentage of all telemedicine services billed by health care providers during the pandemic.

Table 1.1: Top 10 Telemedicine Services Used Pre-Pandemic

HCPCS Code	HCPCS Description	Share of Services
99213	Evaluation and management of an established patient in an office or outpatient location for 15 minutes.	34%
99204	Evaluation and management of a new patient in an office or outpatient location for 45 minutes.	19%
99203	Evaluation and management of a new patient in an office or outpatient location for 30 minutes.	15%
99214	Evaluation and management of an established patient in an office or outpatient location for 25 minutes.	9%
90837	Individual psychotherapy, insight oriented, behavior modifying or supportive, 60 minutes with the patient or family member.	5%
T1013	Sign language or oral interpretive services, per 15 minutes.	2%
90834	Individual psychotherapy, insight oriented, behavior modifying or supportive, 45 minutes with the patient or family member.	2%
99215	Evaluation and management of an established patient in an office or outpatient location for 40 minutes.	2%
G0425	Telehealth consultation, emergency department or initial inpatient, typically 30 minutes communicating with the patient via telehealth.	1%
99212	Evaluation and management of an established patient in an office or outpatient location for 10 minutes.	1%

Table 1.2: Top 10 Telemedicine Services Used During the Pandemic

HCPCS Code	HCPCS Description	Share of Services
99213	Evaluation and management of an established patient in an office or outpatient location for 15 minutes.	50%
99214	Evaluation and management of an established patient in an office or outpatient location for 25 minutes.	17%
99203	Evaluation and management of a new patient in an office or outpatient location for 30 minutes.	4%
90837	Individual psychotherapy, insight oriented, behavior modifying or supportive, 60 minutes with the patient or family member.	3%
99204	Evaluation and management of a new patient in an office or outpatient location for 45 minutes.	3%
99212	Evaluation and management of an established patient in an office or outpatient location for 10 minutes.	3%
99442	Telephone evaluation and management service provided by a physician to an established patient for 11-20 minutes.	3%
97110	Therapeutic procedure, one or more areas, each 15 minutes; therapeutic exercises to develop strength and endurance, range of motion and flexibility.	3%
97530	Therapeutic activities, direct (one-on-one) patient contact (use of dynamic activities to improve functional performance), each 15 minutes.	1%
99441	Telephone evaluation and management service provided by a physician to an established patient for 5-10 minutes.	1%

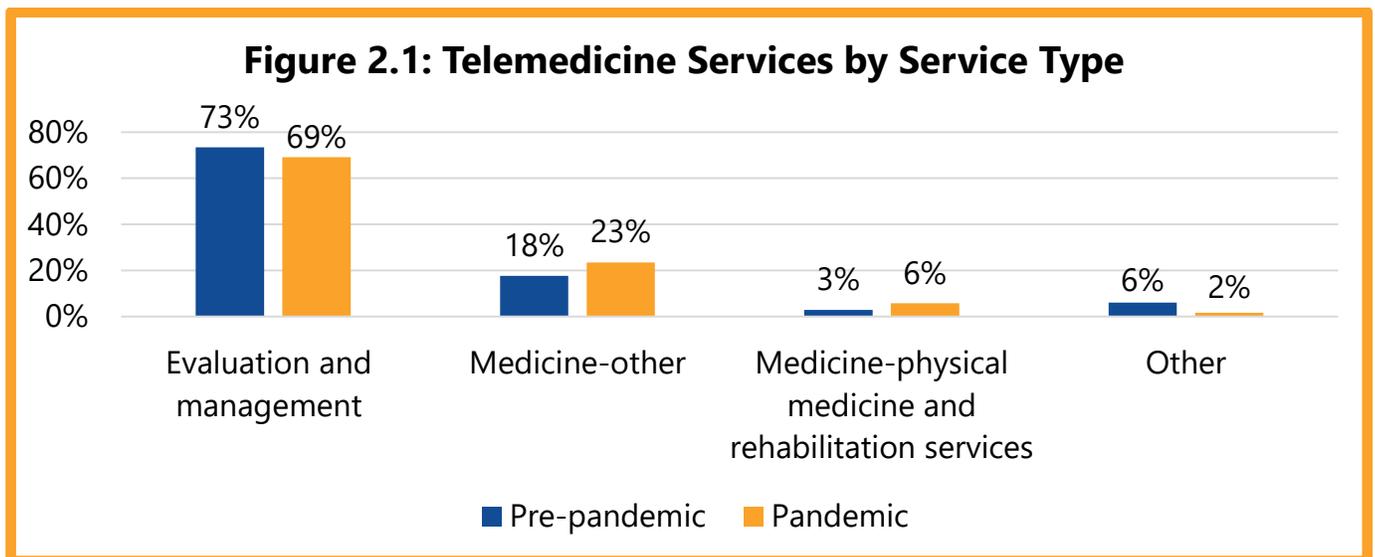
Source: Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2021.

Distribution of Telemedicine Services

This section shows the distribution of telemedicine services by service type, demographics (i.e., injured employees' gender, age, and geographic location), health care provider type, insurance carrier type, and network status before and during the COVID-19 pandemic.

Telemedicine Services by Service Type

As shown in Figure 2.1, the most frequently used categories of telemedicine services were evaluation and management (e.g., office visits) followed by medicine (e.g., mental health services and physical medicine services). The share of the physical medicine and rehabilitation services increased during the pandemic with DWC's emergency rule in April 2020, which allowed certain physical and occupational therapy services to be conducted through telemedicine. While the emergency rule expired in October 2020, CMS continues to allow physical and occupational therapists to perform certain services through telemedicine during the duration of the federal public health emergency.



Source: Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2021. Note: "Medicine – other" includes primarily mental health services, work status reports, and unlisted medicine services. "Other" includes all other services billed as telemedicine services.

Telemedicine Services by Demographics

From September 1, 2018, through July 31, 2021, a total of 21,482 injured employees received at least one telemedicine service for their work-related injuries. Among these injured employees who received telemedicine services, about 96 percent of them received telemedicine services during the pandemic. As shown in Table 2.1, a higher proportion of telemedicine services were used by males during the pandemic, while females used a larger share of telemedicine services pre-pandemic. Injured employees under 35 years old used a higher share of telemedicine services pre-pandemic, while injured employees between 35 and 64 years old used a higher share of telemedicine services during the pandemic. Table 2.1 also shows that most telemedicine services (about nine out of 10 services) were used by injured employees living in urban

counties or in counties where all or part of the county is designated as a Healthcare Professional Shortage Area (HPSA) with small differences before and during the pandemic.⁴

Table 2.1: Telemedicine Services by Demographics

Demographics	Pre-Pandemic	Pandemic
Gender		
Male	43%	60%
Female	57%	40%
Age (in years)		
< 24	13%	6%
25 - 34	24%	19%
35 - 44	24%	26%
45 - 54	22%	29%
55 - 64	14%	16%
65+	3%	3%
Urban/rural counties		
Urban	93%	90%
Rural	7%	10%
Healthcare Professional Shortage Area (HPSA): Primary care		
None of county in shortage area	4%	4%
Part of county in shortage area	42%	47%
Whole county in shortage area	54%	49%

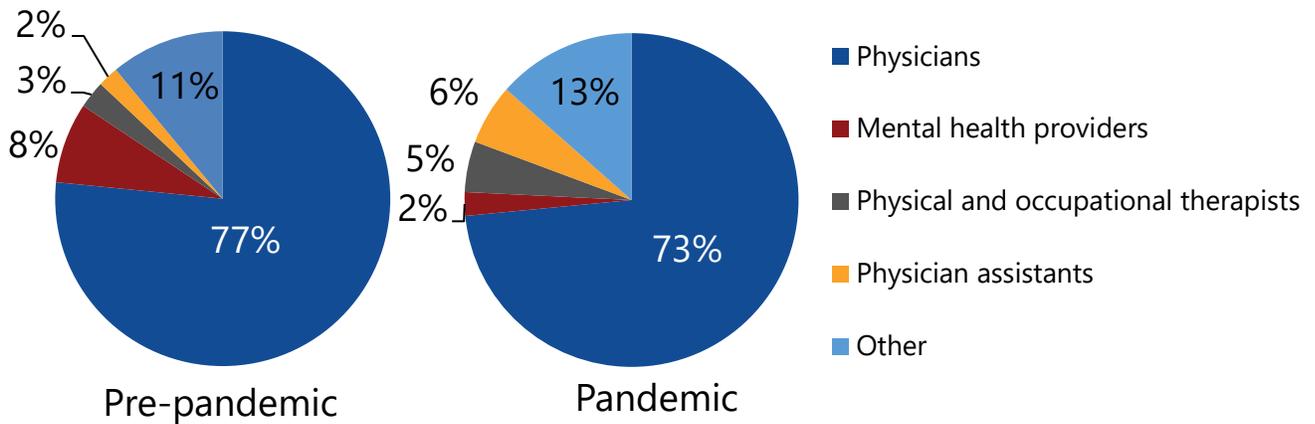
Source: Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2021. Note: The rural counties encompass all non-metropolitan counties and metropolitan counties with all census tracts qualified as rural according to the Office of Rural Health Policy. The primary care HPSA is created by the Health Resources and Services Administration (HRSA). It is used by CMS to identify counties that have a shortage in access to primary care services and whether a service in the counties qualifies to receive the HPSA bonus payment.

Telemedicine Services by Health Care Provider Type

From September 1, 2018, through July 31, 2021, 3,841 health care providers provided telemedicine services to injured employees. Figure 2.2 shows that most telemedicine services were provided by physicians. The share of telemedicine services performed by physician assistants and physical and occupational therapists increased with the pandemic, while the share of services provided by mental health providers (e.g., psychiatrists, psychologists, and social workers) declined.

⁴ For this analysis, counties were classified as urban or rural using the Office of Rural Health Policy's definition of rural. The list of rural counties can be found at www.data.hrsa.gov/Content/Documents/tools/rural-health/forhpeligibleareas.pdf. The analysis also reviewed whether telemedicine services were provided to injured employees in counties designated in whole or in part by the Federal Bureau of Health Workforce as a healthcare professional shortage area (HPSA) for primary care services. The primary care HPSA data is available at www.data.hrsa.gov/data/download#SHORT.

Figure 2.2: Telemedicine Services by Health Care Provider Type

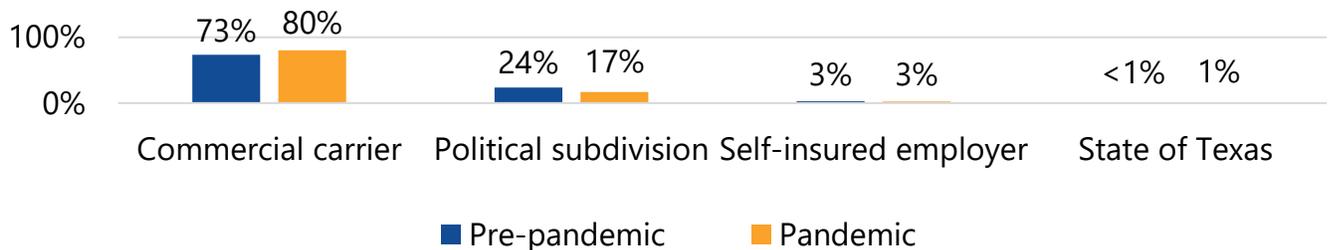


Source: Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2021. Note: "Physicians" includes medical doctors and doctors of osteopathy. "Mental health providers" includes psychiatrists, psychologists, and social workers. "Other" includes chiropractors, licensed professional counselors, registered nurses, advanced practice nurses, licensed vocational nurses, and others.

Telemedicine Services by Insurance Carrier Type

A total of 484 insurance carriers processed medical bills for telemedicine services performed from September 1, 2018, through July 31, 2021. As shown in Figure 2.3, commercial carriers processed the most telemedicine services during that time, followed by political subdivisions, certified self-insured employers, and the State of Texas. The share of telemedicine services increased for commercial carriers during the pandemic, while the share of services for political subdivisions declined. More monitoring is needed to determine the reasons for these changes and whether political subdivisions, self-insured employers, and the State of Texas will expand their use of telemedicine services in the future.

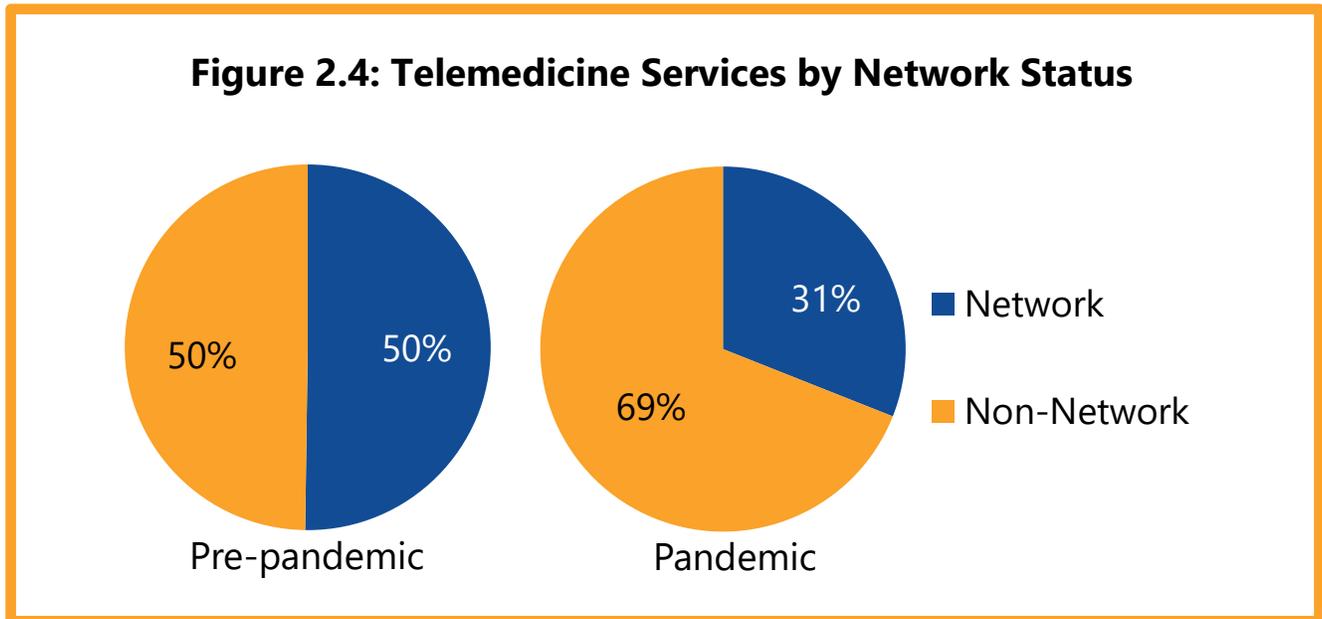
Figure 2.3: Distribution of Telemedicine Services by Insurance Carrier Type



Source: Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2021. Note: "State of Texas" includes the State Office of Risk Management, the University of Texas System, the Texas A&M University System, and the Texas Department of Transportation.

Telemedicine Services by Network Status

Figure 2.4 provides information on the claims with dates of injury from September 1, 2018, to May 31, 2020, which have available network status.⁵ Pre-pandemic use of telemedicine services between network and non-network claims was evenly split. During the pandemic, a higher percentage of telemedicine services (69 percent) was used by non-network claims, while only 31 percent of telemedicine services was used by network claims.



Source: Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2021.

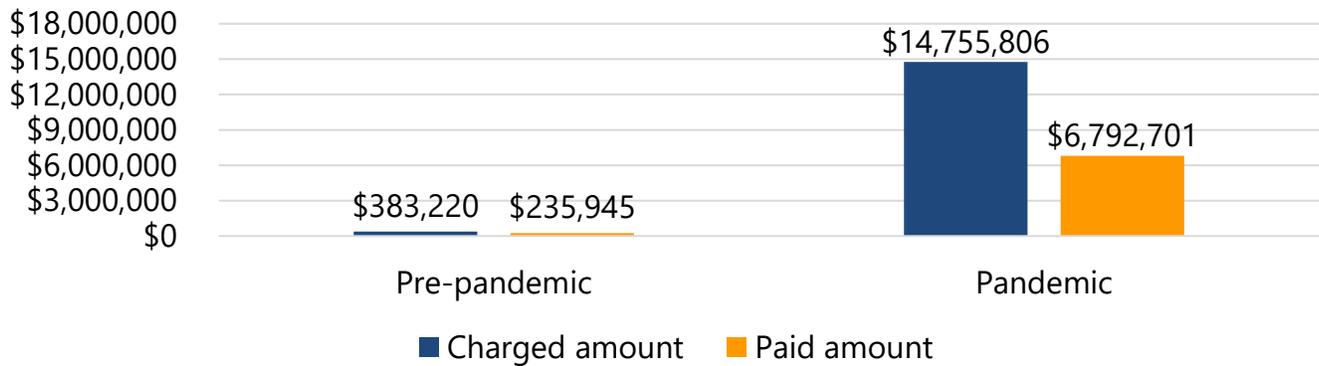
Cost of Telemedicine Services

Telemedicine Cost Overview

From September 1, 2018, through July 31, 2021, health care providers billed for 80,613 telemedicine services and 76 percent of these services were paid by insurance carriers. The total amount charged by health care providers for these telemedicine services was \$15,139,026. The insurance carriers paid a total of \$7,028,646, or 46 percent of the total charged amount. As shown in Figure 3.1, the amount charged and paid for telemedicine services was much higher during the pandemic than before, even though fewer months were covered during the pandemic. The amount charged was \$14,755,806 for telemedicine services during the pandemic with 46 percent (\$6,792,701) paid by insurance carriers. Before the pandemic, the amount charged was \$383,220, but a higher percentage of these charges were paid (62 percent, \$235,945).

⁵ Information about the network status for claims comes from the annual network data call conducted by Texas Department of Insurance, Worker' Compensation Research and Evaluation Group to produce the annual network report card required under Insurance Code §1305.502.

Figure 3.1: Cost of Telemedicine Services Before and During the Pandemic



Source: Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2021.

Telemedicine Cost by Service Year

Table 3.1 shows that the number and cost of telemedicine services significantly increased from service year 2019 to 2020, but that the use and cost of these services began to decline in the first half of service year 2021. Overall, about 46 percent of the charged amount was paid for telemedicine services from September 1, 2018, through June 30, 2021. The pay to charge ratio was the highest in 2019 with 63 percent paid, followed by 2021 (54 percent) and 2018 (49 percent).

Table 3.1: Cost of Telemedicine Services by Service Year

Service Year	# of Billed Services	Total Charged	# of Paid Services	Total Paid
2018 (9/01/2018 -12/31/2018)	215	\$43,647	164	\$21,461
2019	1,412	\$238,461	1,064	\$150,897
2020	61,082	\$11,261,256	45,539	\$4,919,686
2021 (01/01/2021-07/31/2021)	17,904	\$3,595,662	14,107	\$1,936,602
Total	80,613	\$15,139,026	60,874	\$7,028,646

Source: Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2021.

Paid vs. Not-Paid Telemedicine Services

Table 3.2 shows that around 75 percent of telemedicine services billed by health care providers was paid in each service year. For the other 25 percent of services that was not paid, the main reasons provided by insurance carriers were "fee schedule adjustment," and "lacks information or has submission/billing error(s)" (see Table 3.3).⁶

⁶ It should be noted that the reason code "fee schedule adjustment" is meant to describe situations where an insurance carrier pays an amount less than what has been billed by the health care provider. This reason code is not meant for denials, but a significant number of telemedicine medical bills that were completely denied payment by the insurance carrier were coded by the insurance carrier as a fee schedule adjustment.

Table 3.2: Paid and Not-Paid Telemedicine Services by Service Year

Service Year	% of Paid Services	% of Not-Paid Services
2018 (09/01/2018 -12/31/2018)	76%	24%
2019	75%	25%
2020	74%	26%
2021 (01/01/2021-07/31/2021)	79%	21%
Total	75%	25%

Source: Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2021.

Table 3.3: Top 10 Reasons Insurance Carriers Gave for Not-Paid Telemedicine Services

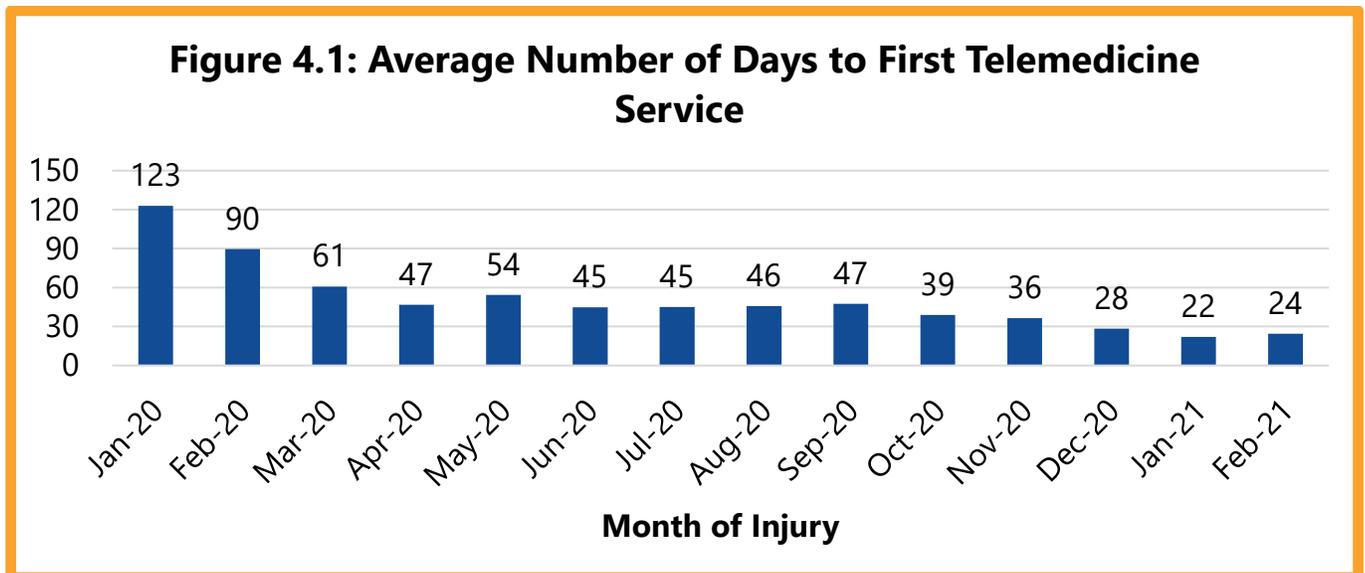
Service Adjustment Reason Code	Description	% of Services
P12	Workers' compensation jurisdictional fee schedule adjustment.	30%
16	Claim/service lacks information or has submission/billing error(s).	11%
131	Claim specific negotiated discount.	6%
P16	Medical provider not authorized/certified to provide treatment to injured workers in this jurisdiction.	6%
4	The procedure code is inconsistent with the modifier used.	5%
8	The procedure code is inconsistent with the provider type/specialty (taxonomy).	5%
219	Based on extent of injury.	4%
P13	Payment reduced or denied based on workers' compensation jurisdictional regulations or payment policies, use only if no other code is applicable.	4%
97	The benefit for this service is included in the payment/allowance for another service/procedure that has already been adjudicated.	3%
58	Treatment was deemed by the payer to have been rendered in an inappropriate or invalid place of service.	3%

Source: Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2021.

Average Number of Days to First Telemedicine Service

Although the Texas workers' compensation system allowed the use of telemedicine services before the adoption of 28 TAC §133.30 in 2018, the availability and use of these services was more limited for work-related injuries until the onset of the pandemic in March 2020. As Figure 4.1 indicates, employees injured in January to March 2020 waited longer for their first telemedicine service compared to the period after the emergency rule was adopted in April 2020.

The average number of days from date of injury to first telemedicine service decreased over time for newer injuries during the pandemic. For injuries occurring in April to September 2020, injured employees received their first telemedicine service about six to seven weeks after their injury. For injuries occurring in September 2020 to February 2021, the average number of days to the first telemedicine service decreased to an average of three to four weeks after the injury.



Source: Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2021. Note: This analysis does not include injuries that occurred before 2020 due to the limited utilization of telemedicine services. This analysis includes injury dates through February 2021 to allow enough time for medical services rendered after the injury date to be billed, processed, and reported to DWC.

Conclusion

This report presents baseline information about the utilization and cost of telemedicine services in the Texas workers' compensation system before and during the COVID-19 pandemic. It is important to monitor the utilization and cost of these services as the pandemic continues, and whether these services are being done in medically underserved geographic areas in the state. The use of telemedicine by network vs. non-network claims is also an area for future research since networks are in a better position to promote the use of telemedicine services with contracted health care providers and enrolled injured employees.



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